

# **Role Congruity Theory versus Expectancy Violation Theory: Women in Leadership**

**An Honors Thesis (PSYS 499)**

**By**

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# ROLE CONGRUITY THEORY VERSUS EXPECTANCY VIOLATION THEORY

## Abstract

The author investigated the conflicting predictions of role congruity theory and expectancy violation theory within the context of elite leadership. Because the current data illustrate female underrepresentation in higher leadership, the principal interest of the study was to determine how prescriptive and descriptive gender stereotypes affect participants' evaluations of female candidates applying to a chief executive officer (CEO) position. The candidates varied on gender and whether they presented agentic or communal traits. The participants indicated their evaluations of candidate competence, likeability, agentic and communal stereotypes, and the level to which they held prescriptive and descriptive stereotypes. The researcher found that participants rated the communal candidate higher in terms of likeability than the agentic candidate regardless of gender. Some tenets of role congruity theory were supported in that male participants indicated that the agentic candidate was more competent when they were male than female and that the communal candidate was more competent when they were female than male. Findings were inconclusive concerning whether descriptive or prescriptive stereotypes had greater influence on attitudes.

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Finally, I would like to thank my family and friends who have graciously allowed me to vent my frustrations and who have shared in my triumphs. I am grateful for their support over the past four years and the chance to showcase the culmination of my undergraduate career.

## Honors Thesis Proposal

For the culmination of my time at Ball State University, I will be conducting a research study within the psychological science department. I intend to investigate to what extent an individual's acceptance of gender stereotypes and subscription to traditional gender roles affects their hiring and evaluating decisions. My hope is that my findings will benefit women, specifically working women. Specifically, I will measure participants' evaluations of applicants that vary on gender and whether they violate or fit positive and negative stereotypes, according to how fitting they would potentially be for managerial positions that vary on difficulty and whether they fall into a stereotypically female-dominated or male-dominated field. I will collect my data in the fall semester, drawing participants from the pool of students enrolled in PSYS 100, after receiving approval from the Institutional Review Board. After analyzing the data, this project will culminate in a research paper that I will present at a student symposium.

Currently, I am assisting my supervising professor in research that is concerned with how job applicants are perceived when they violate or fit positive and negative stereotypes depending on their ethnic identity. Through this experience, I have come to understand the effect of stereotypes more clearly as well as that my interest lies in the realm of gender studies. After reviewing the literature on women in work, I have found compelling evidence of the existence of barriers in the workplace that keep women from ascending the career ladder. What seems to perpetuate this discrimination is the persistence of stereotypes amongst coworkers and superiors resulting in female employees either being barred from positions based on their perceived lack of competence or being denied promotions based on negative interpersonal feelings towards



the individuals. My study will attempt to replicate prior studies as well as to examine the ideas more thoroughly.

Though this task seems daunting, I know that it will help me accomplish my long-term goals. I plan on attending a doctoral program following graduation, and I understand that to move from an undergraduate program to a Ph.D. program is challenging. I want to gain as much relevant experience possible in my field in order to give myself a better chance of achieving my aspirations, and though I have experience as a research assistant, conducting my own study that follows my interests and results from my efforts alone will make me a much more viable candidate. I hope that my findings will reach current and future employees so that the workplace becomes a positive environment for women who may or may not align themselves with stereotypically female traits. I hope that my findings will support the idea that women face barriers to success that men do not in order to disrupt the prejudice that begins at a personal level. Most importantly, I hope that through the process of completing my thesis, I will be able to connect the many concepts that I have learned in my courses preceding this moment in a meaningful way.

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## Role Congruity Theory versus Expectancy Violation Theory: Women in Leadership

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### Abstract

The author investigated the conflicting predictions of role congruity theory and expectancy violation theory within the context of elite leadership. Because the current data illustrate female underrepresentation in higher leadership, the principal interest of the study was to determine how prescriptive and descriptive gender stereotypes affect participants' evaluations of female candidates applying to a chief executive officer (CEO) position. The candidates varied on gender and whether they presented agentic or communal traits. The participants indicated their evaluations of candidate competence, likeability, agentic and communal stereotypes, and the level to which they held prescriptive and descriptive stereotypes. The researcher found that participants rated the communal candidate higher in terms of likeability than the agentic candidate regardless of gender. Some tenets of role congruity theory were supported in that male participants indicated that the agentic candidate was more competent when they were male than female and that the communal candidate was more competent when they were female than male. Findings were inconclusive concerning whether descriptive or prescriptive stereotypes had greater influence on attitudes.

### Role Congruity Theory versus Expectancy Violation Theory: Women in Leadership

The effect of stereotypes on people's attitudes toward others is well established in psychological research. However, a conflict exists in the predictions of evaluations as a function of stereotype violation. Role congruity theory and expectancy violation theory are very similar theories about stereotypes, which assume that an individual's violation of a category-based stereotype elicits a strong response in the observer (Bettencourt, 1997; Eagly and Karau, 2002). However, there is no consensus regarding whether the observer will react more positively or negatively when an outgroup member violates a *negative* stereotype of their salient demographic group. Role congruity theory posits that the observer's reaction would ultimately be negative based on the assumptions about what traits the person possesses (Eagly and Karau, 2002). Conversely, expectancy violation theory posits that the observer's reaction would be positive based on the assumptions about what traits the person should possess (Bettencourt, 1997). The following review of the literature will provide further explanation of these diverging theories and describe how the current study will investigate their conflicting predictions in the context of gender bias in the workplace.

### **Gender Bias in the Workplace**

As women are entering the labor force in increasing numbers, they continue to be underrepresented in certain occupations and fields. According to the U.S. Census Bureau (2006-2010), women make up an increasing portion of management positions, and yet they are underrepresented in positions of higher leadership. For instance, women comprise only 22.2% of chief executives and legislators. Additionally, women are often underrepresented in leadership in traditionally male-dominated fields such as industrial production (18.2%), construction (7.1%), and architecture and engineering (8.1%; U.S. Census Bureau, 2006-2010).

The concept of a glass ceiling or institutional obstacle preventing women from rising to positions of higher leadership or prestige is well known today. However, it is at times unclear how exactly this structure works to inhibit women's progress. Role congruity theory and expectancy violation theory offer explanations for this phenomenon though their exact predictions for evaluations of performance in the work place differ (Eagly and Karau, 2002; Bettencourt, 1997).

### **Role Congruity Theory**

Role congruity theory attempts to explain how stereotypes and agentic and communal traits interact to influence women's success in the work place. Agentic traits are a group of characteristics more commonly ascribed to males, which concerns an "assertive, controlling, and confident" behavior type (Eagly & Johannesen-Schmidt, 2001, p. 783). Communal traits are a group of characteristics more commonly ascribed to females, which concerns an interpersonally sensitive and nurturing behavior type (Eagly and Johannesen-Schmidt, 2001). According to role congruity theory, a person's aptitude for a role in society is determined by the perceived difference between her/his ascribed role's traits and the role she/he is looking to achieve (Eagly & Karau, 2002). In order to better illustrate how these concepts interact in the workplace, I will define them here.

**Descriptive and prescriptive stereotypes.** One way that gender bias manifests in society and in the workplace is through the prescriptive and descriptive stereotypes associated with gender. Prescriptive stereotypes are beliefs about what traits an outgroup member should possess; descriptive stereotypes in contrast are beliefs about what traits an outgroup member actually possesses (Burgess & Borgida, 1999). Stereotypes concerning women are often complementary and serve to create sexism in the workplace in two different ways (Glick &

Fiske, 2001). Descriptive stereotypes about women, such as that they are nurturing, foster benevolent sexism. Benevolent sexism is comprised of superficially chivalrous or positive attitudes toward women, which often lead to rewards of a female's stereotype-congruent behavior. On the other hand, those who practice benevolent sexism often divert females seeking stereotype-incongruent behaviors or roles from their goal. Prescriptive stereotypes about women, such as that they should work within feminine fields, foster hostile sexism. Hostile sexism is comprised of overtly negative attitudes toward women, which often leads to punishment for a female's stereotype-incongruent behavior via sexual harassment or other negative responses. Instances of benevolent and hostile sexism occur when female coworkers violate these prescriptive and descriptive stereotypes (Glick & Fiske, 2001).

From a more practical perspective, Glick and Fiske (2001) hypothesized that hostile sexism and benevolent sexism complement each other and work together to create gender discrimination in the work place. Benevolent sexism occurs when superiors perceive female employees as too fragile to handle the responsibilities of higher leadership and protect them from the more challenging duties by denying a position or promotion. Hostile sexism occurs when coworkers punish accomplished women within a traditionally masculine role, such as a leadership position, through lowered likeability and sexual harassment (Burgess & Borgida, 1999). Through meta-analysis, researchers supported these hypotheses and found that women in lower-level, traditionally feminine occupations were liked more than women in higher-level, traditionally masculine occupations (Glick & Fiske, 2001).

These findings have many practical applications. Rosen and Jerdee (1974) questioned if women with equal qualifications would be evaluated as less capable for a managerial position than male candidates. They found that both male and female participants selected equally

qualified female applicants significantly less often than they did male applicants for managerial positions. In addition, participants rated females lower than males on all measures including “potential for technical aspects of the job,” “potential for long service to the organization,” and “potential for fitting in well in the operation” (Rosen & Jerdee, 512). The findings suggest that female applicants were rejected more often than male applicants because their abilities were incongruent with the associated responsibilities of a managerial position. Additionally, Bobbit-Zeher (2011) performed a content analysis of over 200 sex discrimination accounts in the workplace and found that discrimination most often occurred for female employees in a traditionally male-dominated field. Bobbit-Zeher stated that prescriptive stereotypes created a hostile working environment for female employees who violated these stereotypes. Also, Bobbit-Zeher found that descriptive stereotypes kept female employees from moving into upper management as female applicants were considered not fit for the leadership role. Thus, prescriptive and descriptive stereotypes affect whether female professionals will be hired as well as the conditions of their working environment.

**Agentic and communal traits.** Previous research has demonstrated how prescriptive and descriptive stereotypes prevent female employees from rising to positions of leadership. This occurs because of the differing leadership styles that peers ascribe to male and female professionals. Certain characteristics are often masculinized or feminized and this division is most clearly observed through the categorization of agentic and communal characteristics (Eagly & Johannesen-Schmidt, 2001). As mentioned previously, agentic traits are a group of characteristics concerning an assertive and dominant behavior type (Eagly & Johannesen-Schmidt). These traits are also associated with the managerial or leadership role, as males in the past were most often seen as providers within the family (Eagly, 2001). Communal traits are a



group of characteristics concerning an interpersonally perceptive and encouraging behavior type (Eagly and Johannessen-Schmidt, 2001). These traits are also associated with the domestic role, as females in the past were most often seen as caretakers within the family (Eagly, 2001).

Agentic and communal traits are perceived on a gender binary today.

Abele (2003) documented the impact of agentic traits on career achievement in a two-wave study of 1,930 graduates from a German university. The participants were first measured for their level of communal and agentic traits through a questionnaire immediately after graduation and again a year and a half later. The second survey measured the participants' objective and subjective career success to determine if agentic characteristics led to career success and if career success led to more agentic characteristics (Abele, 2003). Abele found that women possessed more communal characteristics and men possessed more agentic characteristics, and most importantly that agentic characteristics measured in the first wave were significantly correlated with higher objective career success in the second wave. The findings suggest that agentic traits are perceived as advantageous in the career world (Abele, 2003).

Phelan, Moss-Racusin, and Rudman (2008) found that male applicants with agentic characteristics were more likely to be hired than female applicants with agentic characteristics for a computer lab manager position. Moreover, participants perceived female candidates who presented agentic characteristics as capable yet callous. Most importantly, male applicants with agentic characteristics were more likely to be hired than female applicants with agentic characteristics for a computer lab manager position. This bias creates a bind for working women because although their agentic traits may make them objectively qualified for a job, they are seen as violating female stereotypes and thus experience punishment in the workplace (Phelan, Moss-Racusin, & Rudman, 2008).

Within the world of academia, writers of letters of recommendation used more communal traits and fewer agentic traits to describe female applicants than they did male applicants (Madera, Hebl, & Martin, 2009). Letters with a higher proportion of communal content were negatively correlated with hiring ratings (Madera, Hebl, & Martin, 2009). The previous literature on the effects of agentic and communal characteristics illustrates how agentic characteristics are valued in regards to leadership roles and how women's perceived communal characteristics create obstacles for upward mobility.

**Predictions of role congruity theory.** Supporters of role congruity theory understand that prejudice occurs when people perceive differences between an outgroup member's described and prescribed characteristics and a social role's required characteristics. It is important to note that role congruity theory depends on the effect of descriptive stereotypes on one's evaluations of others' competence and hireability. This is because in order to perceive lack of fit between a person's ascribed role and her/his social role, one must hold assumptions about a person's characteristics based solely on her/his group membership (Eagly & Karau, 2002). Researchers posit that the predictions of role congruity theory could apply to multiple roles in a variety of situations, such as when a hiring committee's descriptive or prescriptive stereotypes about women create a conflict between her status as a female and her aspirations to become a business executive (Eagly & Karau, 2002).

The effects of role incongruity on gender discrimination are well documented. Eagly and Karau (2002) developed the role congruity theory based on a meta-analysis of studies on workplace discrimination. They posit that role incongruity occurs because women are often ascribed communal traits while the leadership role is associated with agentic traits. Due to this contrast between the female role and the manager role, women are seen as less competent than

men who are ascribed agentic traits, and kept from ascending the corporate ladder. Additionally, women who are objectively efficacious leaders are seen as violating their gender role by taking on an agentic leadership role and are more harshly evaluated than male leaders who are equally efficacious. This can manifest in lower likeability amongst peers (Eagly & Karau, 2002).

In order to examine the validity of role congruity theory, McDonald and Westphal (2013) sent surveys to first-time board members concerning female and minority members in corporate leadership. Established board members, a group of predominantly white males, were less likely to mentor women and minority member first-time board members than white male first-time board members. The lack of mentorship positively correlated with the lack of additional board appointments that would have allowed more female and minority directors to enter the “executive elite” (McDonald & Westphal, 2013). Interestingly, women were more likely to be mentored when there was a female incumbent director to do so. The findings suggest that the perceived incongruity between the female role and the leadership role is salient in the work place.

### **Expectancy Violation Theory**

The development of expectancy violation theory has complicated the study of gender bias in the work place. Expectancy violation theory posits that when an outgroup member violates a stereotype, she/he will be evaluated more extremely by ingroup members. For instance, a woman who exhibits agentic traits in the work place would be evaluated more negatively than an agentic man if she performs badly. However, this theory further suggests that a woman who exhibits agentic traits would be evaluated more positively than an agentic man if she performs well (Bettencourt, 1997). This difference in evaluation of competence conflicts with predictions based on role congruity theory.

**Descriptive and prescriptive stereotypes.** The difference in evaluation of competence is largely caused by the disruption of descriptive stereotypes and presence of prescriptive stereotypes in evaluations. When the behavioral information provided contradicts one's assumptions about a person based on their group membership, one's descriptive stereotypes lose effect on evaluations of competence for the person (Gill, 2003). Prescriptive stereotypes, assumptions about how a person should be based on his/her group membership, retain their effect and have implications for evaluations of likeability and social skills (Bettencourt 1997; Gill 2003). Essentially, expectancy violation theory posits that *prescriptive* stereotypes have more influence on evaluations of likeability and social skills than *descriptive* stereotypes when a person's behavior is stereotype incongruent (Gill 2003).

**Predictions of expectancy violation theory.** Bettencourt (1997) performed a series of experiments examining expectancy violation theory including one in which participants were shown a picture of an applicant that varied on gender as well as a positive resume of a qualified individual. The applicants were either applying for a position within a traditionally female-dominated field or a male-dominated field. Male and female participants rated female applicants in the male-dominated field higher than female applicants in the female-dominated field on a measure of global favorability. Additionally, participants rated male applicants in the female-dominated field higher than male applicants in the male-dominated field on global favorability (Bettencourt, 1997). This suggests that females applying for higher leadership positions would be evaluated as more competent than males as the females' applications violate the expectations of participants for women in the work place.

## The Current Study

**Limitations of previous studies.** Much of the previous literature examines how stereotypes affect people's perceptions of others. Many studies, however, fail to differentiate between descriptive and prescriptive stereotypes (e.g., Bettencourt, 1997; Eagly & Karau, 2002; Madera, Hebl, & Martin, 2009; Phelan, Moss-Racusin, & Rudman, 2008). It is therefore unclear whether one or the other carries more weight in situations of gender bias. Gill (2003) attempted to illustrate the differences between descriptive and prescriptive stereotypes especially in how they generate bias: descriptive stereotypes foster assumptions about others based on their salient demographic group, while prescriptive stereotypes foster contempt for others who violate these assumptions. The researcher further argues that when relevant behavioral information is provided, descriptive stereotypes but not prescriptive stereotypes are disrupted and thus have no effect (Gill, 2003).

When refining role congruity and expectancy violation theory, it is crucial to distinguish which kinds of stereotypes are at play. If participants are more strongly influenced by descriptive stereotypes, there should be a negative effect for stereotype-inconsistent applicants on competence or hireability ratings, supporting role congruity theory. However, if participants are more strongly influenced by prescriptive stereotypes, there should only be a negative effect for stereotype-inconsistent applicants on social skills and likeability ratings, supporting expectancy violation theory. In more concrete terms, if one believes women are incapable leaders, one will be less likely to hire a female applicant than a male applicant; if one instead believes that women *should not* be leaders, one will perceive female applicants as less likeable than male applicants seeking a leadership position. To determine how participants are influenced by these stereotypes,

the current study measured participants' descriptive and prescriptive stereotypes. This information will provide support for either role congruity or expectancy violation theory.

The current study attempted to provide an updated design to study how prescriptive and descriptive stereotypes play a role in promotion decisions for female employees as compared to equally qualified male employees, endeavoring to resolve methodological limitations of previous research. These limitations include lack of a representational sample and outdated data (Rosen and Jerdee, 1974). It is important to bring the scenario into a modern setting which is relevant to female professionals, that is, the corporate workplace, while measuring whether gender alone determines how participants make hiring decisions for a candidate pursuing executive leadership. The setting is especially significant in that the literature illustrates how agentic traits are increasingly valued as one ascends the career ladder (Eagly & Karau, 2002). By manipulating whether the candidate possesses agentic or communal characteristics as well as candidate gender, the current study isolated in order to determine which variables are most influential in hiring decisions through an empirical design. The current study also measured whether participants value agentic or communal traits more or equally in hiring decisions.

**The main objective.** The main objective of the current study is to examine the contrasting predictions of role congruity theory and expectancy violation theory within a single empirical design. This theoretical conflict becomes significant in evaluations of successful female applicants who adopt agentic traits. According to role congruity theory, these applicants would be rated lower than equally qualified male applicants because though efficacious workers, their traits are incongruent with their ascribed role. However, according to expectancy evaluation theory, these applicants would be rated higher than equally qualified male applicants because the violation of the observer's stereotypes about women's traits causes the observer to evaluate the

applicant more extremely in the positive. Because the literature has yet to resolve this conflict, the current study aimed to provide evidence supporting one theory or refine both in order to make more accurate predictions in the future. Specifically, the current study examined whether female leaders are evaluated more negatively or more positively than equally qualified and efficacious male leaders on ratings of current leadership performance, hireability for an upper leadership position, and likeability. Though there is empirical evidence for both theories, the underrepresentation of women in leadership positions suggests that predictions based on role congruity theory are most plausible (U.S. Department of Labor, 2010).

## **Method**

### **Participants**

Participants were recruited from the Introduction to Psychology course at Ball State University through SONA software. All participants were 18 years or older and currently enrolled in the course. Participants voluntarily participated in the study. 122 participants were randomly assigned to one of four conditions. Participants received a half-hour credit for their participation and fulfillment of the course's research participation requirement.

### **Materials and Design**

The current study was a 2 (Candidate gender) x 2 (Candidate's presentation of agentic or communal qualities) between-subjects design.

**Job description.** Participants were given a brief job description of a chief executive officer (CEO), which stated the requirements and the duties of the position. This job was chosen because of the underrepresentation of females in comparison to males in the current job market



as well as that it is a position of higher leadership that is often associated with agentic rather than communal characteristics (U.S. Department of Labor).

**Candidate reference and resume.** Participants were given a reference and resume for their candidate. The references were positive evaluations of the candidate and either detailed the candidate's agentic qualities or communal qualities as a leader within the field through descriptions utilizing respective adjectives. For instance, in the agentic reference, the candidate was called "dominant," while in the communal reference, the candidate was called, "nurturing." Both resumes met all of the qualifications listed in the job description mentioned previously and differed from each other only in name; one resume belonged to Jessica Thomas, one resume belonged to Jacob Thomas.

**Candidate evaluation survey.** The participants were asked to complete a survey rating the candidate on a 7-point Likert scale on current leadership performance based on their reference (Least successful to Most successful), hireability (Least likely to Most likely), and likeability as a function of whether the participant would like to work with the candidate (Least likely to Most likely). Participants were asked to complete a valence rating of agentic and communal leadership characteristics on a 7-point Likert scale (Least important to Most important). Next, the participants were asked to indicate the extent to which they held descriptive and prescriptive stereotypes concerning gender on a 7-point Likert scale. Finally, participants were asked to indicate demographic information.

## **Procedure**

Participants completed an online survey through Qualtrics software after giving informed consent. The stated purpose of the study was to understand how people make hiring decisions.



First, all participants viewed the job description followed by the reference and resume of either an agentic female candidate, communal female candidate, agentic male candidate, or communal male candidate. Next, participants completed the candidate evaluation survey. Finally, participants were debriefed about the complete purpose of the study and thanked for their time.

## Results

### Participants

Participants were recruited from the Introduction to Psychology course at Ball State University through SONA software. All participants were 18 years or older and currently enrolled in the course. 143 participants voluntarily participated in the study. Empty data entries were deleted as well as data for participants who failed the manipulation check, eliminating 21 participants. The remaining 122 participants (72.1% female, 77.9% Caucasian, 92.6% heterosexual, 57% freshman, 24.8% sophomore) were randomly assigned to one of four conditions and their responses were analyzed.

### Hypothesis Testing

**Candidate sex and agentic/communal presentation.** A 2 x 2 (Candidate Sex x Agentic/Communal Presentation) Multivariate Analysis of Variance was conducted to determine the independent variables' effect on four dependent variables (perceptions of current leadership competence, hireability, the likelihood that participants would work with the candidate and the likelihood that participants would get along with the candidate). There was a significant agentic/communal presentation main effect on participants' ratings of the likelihood they would like to work with the candidate,  $F(1, 117) = 4.38, p < .05, \eta^2 = .04$  and on participants' ratings of the likelihood they would get along with the candidate,  $F(1, 117) = 19.72, p < .001, \eta^2 = .14$ . Post-hoc analyses revealed that participants reported wanting to work with the communal

candidate ( $M = 6.20, SD = .94$ ) more than they did the agentic candidate ( $M = 5.81, SD = 1.11$ ). In addition, participants reported that they were more likely to get along with the communal candidate ( $M = 6.15, SD = 1.05$ ) than the agentic candidate ( $M = 5.15, SD = 1.33$ ).

Contrary to my hypothesis, there was no significant main effect of candidate sex on any of the dependent variables,  $F(4, 114) = .100, p = .98$ . Additionally, there was no significant interaction between candidate sex and agentic/communal presentation on any measures,  $F(4, 114) = .238, p = .92$ .

**Descriptive and prescriptive stereotypes.** An analysis of the relationship between endorsement of descriptive and prescriptive stereotypes and measures of current leadership competence, hireability, and likeability was conducted. Agentic scores are comprised of the mean ratings of six descriptors (dominant, competitive, outspoken, confident, autonomous, and ambitious). Communal scores are comprised of the mean ratings of six descriptors (compassionate, nurturing, tactful, interpersonal, ambitious, altruistic, and diplomatic). Internal reliability alphas for all descriptive and prescriptive, communal and agentic, and male and female stereotypes were above .70 (descriptive female stereotypes-agentic,  $\alpha = .803$ , prescriptive female stereotypes-agentic,  $\alpha = .727$ , descriptive female stereotypes-communal,  $\alpha = .754$ , prescriptive female stereotypes-communal,  $\alpha = .752$ , descriptive male stereotypes-agentic,  $\alpha = .734$ , prescriptive male stereotypes-agentic,  $\alpha = .702$ , descriptive male stereotypes-communal,  $\alpha = .812$ , and prescriptive male stereotypes-communal,  $\alpha = .783$ ). Stereotypes of males and females were analyzed separately. The data was split by candidate sex and agentic/communal presentation. As a number of correlations were conducted, their significance may be the result of capitalizing on chance. Bivariate correlation results are presented in Tables 1 and 2. Relevant significant correlations for each type of candidate are specified below.

***Female agentic candidate.*** There was a significant correlation between hireability ratings and endorsement of descriptive female-communal stereotypes,  $r = .48, p < .05$ . Thus, the more participants viewed most women as communal, the more likely they would hire the female agentic candidate.

***Female communal candidate.*** There was a significant correlation between endorsement of descriptive female-communal stereotypes and hireability ratings,  $r = .39, p < .05$ , and likeability ratings,  $r = .39, p < .05$ . Thus, the more participants viewed most women as communal, the more they reported liking and wanting to hire the female communal candidate.

***Male agentic candidate.*** There was a significant correlation between endorsement of descriptive male-agentic stereotypes and hireability,  $r = .37, p < .05$ , likelihood participants would like to work with the candidate,  $r = .43, p < .01$ , and likelihood participants would get along with the candidate,  $r = .63, p < .001$ . Thus, participants who viewed most men as more agentic reported more likely to want to hire, to work with, and to like the male agentic candidate. There was a significant correlation between endorsement of descriptive male-communal stereotypes and likelihood participants would get along with the candidate,  $r = .34, p < .05$ . Thus, participants who believed that men are more communal reported that they were more likely to get along with the male agentic candidate. There was a significant correlation between endorsement of prescriptive male-agentic stereotypes and likelihood participants would get along with the candidate,  $r = .47, p < .01$ . Thus, participants who believed that men should be agentic reported that they were more likely to get along with the male agentic candidate.

***Male communal candidate.*** There were no relevant significant correlations for the male communal candidate.

Table 1  
*Correlations of Dependent Variables and Descriptive Stereotypes*

N = 22		Competence	Hireability	Work With	Get Along
Descriptive female-agentic	FA	$r = -.015$	$r = .243$	$r = .098$	$r = .179$
	FC	$r = .174$	$r = .323$	$r = .152$	$r = .114$
	MA	$r = .333^*$	$r = .205$	$r = .191$	$r = .245$
	MC	$r = .022$	$r = .178$	$r = .125$	$r = .057$
Descriptive female-communal	FA	$r = .414$	$r = .479^*$	$r = .243$	$r = .327$
	FC	$r = .287$	$r = .385^*$	$r = .274$	$r = .388^*$
	MA	$r = .166$	$r = .095$	$r = .005$	$r = .290$
	MC	$r = .309$	$r = .200$	$r = .193$	$r = .256$
Descriptive male-agentic	FA	$r = .064$	$r = .311$	$r = .286$	$r = .323$
	FC	$r = .359^*$	$r = .390^*$	$r = .387^*$	$r = .433^*$
	MA	$r = .179$	$r = .371^*$	$r = .427^{**}$	$r = .630^{***}$
	MC	$r = .199$	$r = .140$	$r = .187$	$r = .203$
Descriptive male-communal	FA	$r = -.098$	$r = .256$	$r = .280$	$r = .213$
	FC	$r = .296$	$r = .407^*$	$r = .172$	$r = .332$
	MA	$r = .252$	$r = .001$	$r = .143$	$r = .338^*$
	MC	$r = -.099$	$r = -.179$	$r = -.113$	$r = -.095$

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .003$   
Note. Work With = Likelihood participants would like to work with the candidate, Get Along = Likelihood participants would get along with the candidate. FA = Female Agentic candidate, FC = Female Communal candidate, MA = Male Agentic candidate, MC = Male Communal candidate.

Table 2

Correlations of Dependent Variables and Prescriptive Stereotypes

N = 22		Competence	Hireability	Work With	Get Along
Prescriptive female-agentic	FA	$r = .128$	$r = -.023$	$r = -.078$	$r = .314$
	FC	$r = -.038$	$r = .107$	$r = .115$	$r = .145$
	MA	$r = .388^*$	$r = .332^*$	$r = .170$	$r = .219$
	MC	$r = .129$	$r = .050$	$r = .138$	$r = -.090$
Prescriptive female-communal	FA	$r = .324$	$r = .154$	$r = -.065$	$r = .063$
	FC	$r = .137$	$r = .226$	$r = .308$	$r = .294$
	MA	$r = .252$	$r = .251$	$r = .073$	$r = .231$
	MC	$r = .391^*$	$r = .282$	$r = .397^*$	$r = .231$
Prescriptive male-agentic	FA	$r = .222$	$r = -.091$	$r = -.121$	$r = .251$
	FC	$r = .014$	$r = .123$	$r = .115$	$r = .289$
	MA	$r = .184$	$r = .222$	$r = .285$	$r = .468^{***}$
	MC	$r = .273$	$r = .076$	$r = .271$	$r = -.036$
Prescriptive male-communal	FA	$r = .392$	$r = .127$	$r = -.149$	$r = .135$
	FC	$r = .121$	$r = .279$	$r = .318$	$r = .324$
	MA	$r = .209$	$r = .223$	$r = .056$	$r = .028$
	MC	$r = .269$	$r = .172$	$r = .282$	$r = .157$

\*p<.05, \*\*p<.01, \*\*\*p<.003

Note. Work With = Likelihood participants would like to work with the candidate, Get Along = Likelihood participants would get along with the candidate. FA = Female Agentic candidate, FC = Female Communal candidate, MA = Male Agentic candidate, MC = Male Communal candidate.

### Exploratory Analyses

A 2 x 2 x 2 (Candidate Sex x Agentic/Communal Presentation x Participant Sex)

MANOVA was conducted to determine the effect of the independent variables on measures of current competence as a leader, hireability, likelihood participants would like to work with the candidate, and likelihood participants would get along with the candidate. Results revealed a significant 3-way interaction between agentic/communal presentation, candidate sex, and participant's ratings of candidate's current competence,  $F(1, 29) = 9.28, p < .01, \eta^2 = .24$ .

Bonferroni post hoc tests showed that male participants indicated significantly higher ratings of current competence for a male agentic candidate ( $M = 6.20, SD = .42$ ) than a female agentic candidate ( $M = 5.71, SD = .49$ ). In addition, male participants' ratings of current competence for the female communal candidate ( $M = 6.57, SD = .53$ ) were significantly higher than for the male communal candidate ( $M = 5.78, SD = .83$ ). No other significant effects were found for male participants. Female participants' ratings of candidates did not vary by the candidates' sex or agentic/communal presentation.

There was a significant 2-way interaction for participant's sex and agentic/communal presentation on ratings of likelihood they would get along with the candidate,  $F(1, 29) = 4.22, p < .05, \eta^2 = .13$ . Male participants indicated higher ratings of likeability for the communal candidate ( $M = 5.94, SD = 1.39$ ) than the agentic candidate ( $M = 4.88, SD = 1.69$ ). There was also a significant 2-way interaction for participants' sex and agentic/communal presentation on ratings of likelihood they would get along with the candidate,  $F(1, 84) = 16.27, p < .001, \eta^2 = .16$ . Specifically, female participants indicated significantly higher ratings of likeability for the communal candidate ( $M = 6.23, SD = .90$ ) than they did the agentic candidate ( $M = 5.24, SD = 1.17$ ). No other effects were significant for female participants.



### **Discussion**

The purpose of the current study was to determine whether role congruity theory or expectancy violation theory was more valid for making predictions of hiring decisions. Specifically, I intended to determine whether the violation of a negative stereotype, i.e. a female candidate competent in a leadership role, would produce a negative (predicted by role congruity theory) or positive (predicted by expectancy violation theory) effect on hiring decisions. None of the original hypotheses were consistently supported by the findings. There was a significant main effect of agentic/communal presentation on likeability, suggesting that participants preferred the communal candidate to the agentic candidate. This unanticipated finding was most likely due to the positive interpersonal qualities of the communal candidate. It is possible that this resulted from a changing impression of the leadership role that is becoming more democratic and incorporates more communal qualities. While this is arguably a positive sign for working females, it is difficult to interpret unambiguously in terms of comparing role congruity and expectancy violation theory.

### **Descriptive vs. Prescriptive Stereotypes**

In order to clarify which theory was most effective at predicting hiring decisions, participants' endorsement of descriptive and prescriptive stereotypes were measured. According to role congruity theory, decisions are primarily based on one's descriptive stereotypes, while expectancy violation theory states that decisions are based on one's prescriptive stereotypes (Eagly & Karau, 2002; Gill, 2003). The present findings suggest that descriptive stereotypes were more often associated with ratings of competence, hireability, and likeability than prescriptive stereotypes. However, after careful consideration, some of these relationships may provide support for expectancy violation theory rather than role congruity. For instance, there

was a significant positive correlation between endorsement of descriptive female-communal stereotypes and hireability of the female agentic candidate. In other words, the more one believes that females are communal, the more likely one is to hire an agentic candidate, or a candidate that violates this descriptive stereotype. This suggests that the violation of the communal female stereotype causes one to evaluate the candidate more extremely in the direction of their qualifications, in this case competent. Additionally, it is important to note that due to the number of correlations run for each candidate type, only two correlations were significant at the subsequent  $p$  value (.003) and are specified in Tables 1 and 2. Therefore the current study's findings are inconclusive concerning whether people's judgments are primarily governed by descriptive or prescriptive stereotypes.

### **Exploratory Analyses**

While there was no significant main effect for candidate sex or significant interaction between candidate sex and agentic/communal presentation, contrary to my hypothesis, I was interested in whether the effects would be significant when participant sex was included as a variable. While only the main effect of agentic/communal presentation remained significant for female participants, there was a significant interaction between candidate sex and agentic/communal presentation for male participants. Specifically, male participants indicated that the agentic candidate was more competent when they were male than female, and that the communal candidate was more competent when they were female than male. This finding supports role congruity theory in that, when the candidate violated their salient stereotype (agentic female or communal male), they were evaluated more negatively than when they fit their stereotype (communal female or agentic male). More simply, the perceived fit, rather than a



violation, between agentic and male as well as between communal and female had a positive effect on the candidate's perceived competence as a leader.

### **Limitations**

As stated previously, participants were recruited from an introductory psychology course. The competitive nature of this recruitment as well as the relatively short period allotted for collecting data limited the sample size of the current study. Consequently, there could have been more support for role congruity theory in terms of a main effect of candidate sex or a mirrored interaction between candidate sex and agentic/communal presentation for female participants had sample size been greater. Further, the existing interaction for male participants might have been larger if more males were included in the sample. Additionally, it is important to acknowledge the relatively limited demographics of the sample. Participants were predominantly Caucasian and female. Future studies should strive for a sample that recruits outside the student population and that is more ethnically diverse and gender balanced.

### **Suggestions for Future Research**

In order to more accurately determine whether descriptive or prescriptive stereotypes are more influential in making judgments about others, future research should focus on developing a more effective measure of the endorsement of each type. The scale used in the current study consisted of a list of agentic and communal attributes to be rated on their association with men or women. A more subtle measure of descriptive and prescriptive stereotype endorsement for women and men would be more practical and probably elicit greater differences between the scales.

In order to improve the ecological validity of the current design, it would be pertinent to include more materials that would be evaluated by the interviewer including a candidate photo

(controlled for attractiveness and ethnicity), which would also make the manipulation of candidate sex more salient. Additionally, it would be helpful to investigate further whether there is a consistent gender difference in perceptions of leadership competence. Prime (2009) found that female participants evaluated female candidates as more competent in terms of performing communal behaviors than male candidates. Additionally, female participants evaluated male candidates as more competent in terms of performing agentic behaviors than female candidates. It is important to determine whether the interaction between target sex and agentic/communal presentation is salient for both female and male observers as these potential findings could give insight into the hiring process and support gender-inclusive hiring for management and elite leadership positions.

Finally, it is relevant to investigate whether ethnicity moderates the main effect of agentic/communal presentation on evaluations of likeability. For instance, would a communal Asian American candidate be evaluated similarly to a communal Caucasian candidate? It is possible that the stereotype that Asian Americans are competent yet callous, as demonstrated by Fiske, Cuddy, Glick and Xu's (2002) examination of stereotype content, would clash with the interpersonally sensitive nature of a communal individual and thus cause the Asian American candidate to suffer in terms of likeability relative to the Caucasian candidate. As the hiring process rarely only includes those of Euro-American descent, it is pertinent to include ethnicity in analyses.

## References

- Bettencourt, B., Dill, K., Greathouse, S., Charlton, K., & Mulholland, A. (1997). Evaluations of ingroup and outgroup members: The role of category-based expectancy violation. *Journal of Experimental Social Psychology, 33*, 244-275.
- Eagly, A., & Karau, S. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573-598
- Eagly, A., & Johannesen-Schmidt, M. (2001). The leadership styles of women and men. *Journal of Social Issues, 57*(4).
- Fiske, S.T., Cuddy, A.J.C., Glick, P., Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*(6), 878-902.
- Gill, M. (2003). When information does not deter stereotyping: Prescriptive stereotyping can foster bias under conditions that deter descriptive stereotyping. *Journal of Experimental Social Psychology, 40*, 619-632.
- Madera, J., Hebl, M., & Martin, R. (2009). Gender and letters of recommendation for academia: Agentic and communal differences. *Journal of Applied Psychology, 94*(6), 1591-1599.
- Phelan, J., Moss-Racusin, C., & Rudman, L. (2008). Competent yet out in the cold: Shifting criteria for hiring reflect backlash toward agentic women. *Psychology of Women Quarterly, 32*, 406-413.

- Prime, J.L., Carter, N.M., & Welbourne, T.M. (2009) Women “take care,” men, “take charge”: Managers’ stereotypic perceptions of women and men leaders. *The Psychologist-Manager Journal*, 12, 25-49.
- Rosen, B., & Jerdee, T. (1974). Effects of applicant's sex and difficulty of job on evaluations of candidates for managerial positions. *Journal of Applied Psychology*, 59(4), 511-512.

## Appendices

### Appendix A. Informed Consent Page

**Study Title** Hiring Decisions

**Study Purpose and Rationale**

The purpose of this research project is to investigate how individuals make hiring decisions.

**Inclusion/Exclusion Criteria**

To be eligible to participate in this study, you must be at least 18 years of age.

**Participation Procedures and Duration**

For this project, you will be asked to read a brief job description, one candidate's resume, and the candidate's reference letter. Next you will be asked to complete a survey indicating your evaluations of the candidate and your attitudes about various issues. Finally, you will be asked to answer a few demographic questions. It will take no more than 30 minutes to complete the survey. If you are enrolled as a student in PSYS 100, you will receive .5 credit for participating.

**Data Confidentiality or Anonymity**

All data will be maintained as anonymous and no identifying information such as names will appear in any publication or presentation of the data. Identifying information including names and ID numbers will be used only for class credit purposes and will be stored in a separate database than the one containing responses to the study survey. No one will be able to link your survey responses to you.

**Storage of Data**

The data will be stored on the researcher's password-protected computer for seven years. Only the principal investigator, faculty advisor, and course professor will have access to this data.

**Risks or Discomforts**

There are no foreseeable risks for participating in the study. You may choose to not answer any of the questions at any time.

**Who to Contact Should You Experience Any Negative Effects from Participating in this Study**

Should you experience any feelings of discomfort, there are counseling services available to you through the Ball State University Counseling Center in Lucina Hall, 765-285-1736

**Benefits**

One benefit you may gain from your participation in this study may be a better understanding of how you make hiring decisions and an increased awareness of your attitudes towards some social issues.

**Voluntary Participation**

Your participation in this study is completely voluntary and you are free to withdraw your permission at anytime for any reason without penalty or prejudice from the investigator. Please feel free to ask any questions of the investigator prior to or after completing this study.

**IRB Contact Information**

For one’s rights as a research subject, you may contact the following: For questions about your rights as a research subject, please contact the Director, Office of Research Integrity, Ball State University, Muncie, IN 47306, (765) 285-5070 or at [irb@bsu.edu](mailto:irb@bsu.edu).

**Study Title** Hiring Decisions

**Researcher Contact Information**

Principal Investigator:	Faculty Supervisor:
Casiana A. J. Warfield, Undergraduate Student	Dr. Linh Littleford
Psychological Science	Psychological Science
Ball State University	Ball State University
Muncie, IN 47306	Muncie, IN 47306
Telephone: (317) 903-0100	Telephone: (765) 285-1707
Email: <a href="mailto:cawarfield@bsu.edu">cawarfield@bsu.edu</a>	Email: <a href="mailto:lnlittleford@bsu.edu">lnlittleford@bsu.edu</a>

**Appendix B. Credit Page**

\*Note. The responses to the following three questions will not be linked to participants' responses to any of the remaining questions in this survey\*

To receive .5 credit for participating in this study, please enter the following:

Your name (Last, First):

Your student ID#

Your e-mail:

**Appendix C: Survey Materials****Job Description****Chief Executive Officer (CEO) for American Health Systems**Duties:

- Direct overall company operations efficiently;
- Create and maintain company policy;
- Work with other executives to achieve company goals;
- Manage other officers to meet their departmental goals;
- Appoint managers and other officers to appropriate posts

Necessary traits:

- Ability to communicate effectively;
- Ability to make decisions for company;
- Ability to lead others;
- Ability to manage others;
- Ability to solve problems and think creatively;
- Ability to manage time

Qualifications:

- Bachelor's in Business administration, law, or liberal arts
- Master's in Business Administration (Recommended)
- Experience within the field

Pay Range:

\$170,000 - \$190,000 annually



**Successful Resume**

**Jessica Thomas/Jacob Thomas**

**514 Evergreen Dr. Walton, IN 45091**

**765-555-0800**

Objective: Chief Executive Officer for American Health Systems

Professional Experience

**Director**, *American Health Systems*, Walton, IN

- Developed risk-management practices
- Guided employees to reach company goals
- Analyzed and improved the operational process

**General Manager**, *National Health Corporation*, Chicago, IL

- Managed all departments cohesively
- Increased all-employee productivity
- Boosted sales efficiently

**Operations Manager**, *National Health Corporation*, Chicago, IL

- Supervised company-wide functions
- Managed packaging and shipping activities
- Created innovative system to make production more efficient

Education

Bachelor of Arts in Business Administration, University of Michigan, Ann Arbor, MI

Master's in Business Administration from University of Chicago, Chicago, IL

\*Note. Present either one or the other

### **Agentic Candidate Reference Letter**

To Whom It May Concern:

Jessica Thomas/Jacob Thomas has been an asset to our company as a Director of Operations at American Health Systems. As her/his immediate supervisor, I have witnessed her/his work for the past five years. Many of my peers and I have been nothing but satisfied with her/his efforts.

Mrs./Mr. Thomas has a dominant leadership style that has aided her/him in her/his position within our organization. Her/His competitive nature has allowed her/him to rise as an influential figure in the health industry over the years. As a confident employee, she/he has become a model that I hope her/his peers will imitate. She/He has made great strides in improving the work place environment due to her/his outspoken character. Overall, her/his autonomous approach to business has served her/him well.

Mrs./Mr. Thomas would be a wonderful addition to your team. If possible, I would hire her/him again based on their past work and commitment to their career.

### **Communal Candidate Reference Letter**

To Whom It May Concern:

Jessica Thomas/Jacob Thomas has been an asset to our company as a Director of Operations at American Health Systems. As her/his immediate supervisor, I have witnessed her/his work for the past five years. Many of my peers and I have been nothing but satisfied with her/his efforts.

Mrs./Mr. Thomas has a nurturing leadership style that has aided her/him in her/his position within our organization. Her/His diplomatic nature has allowed her/him to rise as an influential figure in the health industry over the years. As a compassionate employee, she/he has become a model that I hope her/his peers will imitate. She/He has made great strides in improving the work place

environment due to her/his tactful character. Overall, her/his interpersonal approach to business has served her/him well.

Mrs./Mr. Thomas would be a wonderful addition to your team. If possible, I would hire her/him again based on their past work and commitment to their career.

## Survey Questions

### Evaluating the Candidate:

1. Based on the candidate's resume and reference letter, rate the candidate's CURRENT performance as leader? (1 to 7; 1=Least successful; 7=Most successful)
2. What is the likelihood that you would hire the candidate? (1 to 7; 1=Least likely; 7=Most likely)
3. What is the likelihood that you would like to work with the candidate? (1 to 7; 1=Least likely; 7=Most likely)
4. What is the likelihood that you would get along with the candidate? (1 to 7; 1=Least likely; 7=Most likely)

### Evaluating Agentic and Communal Traits:

\*Note. Participants will see items in random order

In general, how important are each of the following traits to the leadership role? (1 to 7; 1=Least important; 7=Most important)

1. Dominant
2. Competitive
3. Outspoken
4. Confident
5. Autonomous
6. Compassionate
7. Nurturing
8. Tactful
9. Interpersonal
10. Ambitious
11. Altruistic
12. Diplomatic

### Evaluating Participants' Prescriptive and Descriptive Stereotypes:

\*Note. The two gender sections will be presented in random order. In addition, the items for each gender will be presented in random order.

Please indicate your thoughts on the following statements:

Most women are: (1 to 7; 1=Strongly disagree; 7=Strongly agree)

1. Dominant
2. Competitive
3. Outspoken
4. Confident
5. Autonomous
6. Compassionate
7. Nurturing
8. Tactful
9. Interpersonal
10. Ambitious
11. Altruistic
12. Diplomatic

Most men are: (1 to 7; 1=Strongly disagree; 7=Strongly agree)

1. Dominant
2. Competitive
3. Outspoken
4. Confident
5. Autonomous
6. Compassionate
7. Nurturing
8. Tactful
9. Interpersonal
10. Ambitious

11. Altruistic

12. Diplomatic

\*Note. The two gender sections will be presented in random order. In addition, the items for each gender will be presented in random order.

The ideal woman is: (1 to 7; 1=Strongly disagree; 7=Strongly agree)

1. Dominant

2. Competitive

3. Outspoken

4. Confident

5. Autonomous

6. Compassionate

7. Nurturing

8. Tactful

9. Interpersonal

10. Ambitious

11. Altruistic

12. Diplomatic

The ideal man is: (1 to 7; 1=Strongly disagree; 7=Strongly agree)

1. Dominant

2. Competitive

3. Outspoken

4. Confident

5. Autonomous

6. Compassionate

7. Nurturing

8. Tactful

9. Interpersonal

10. Ambitious

11. Altruistic

12. Diplomatic

Demographic Information:

Please answer the following questions about yourself. Your responses to these questions are anonymous and will not be linked to you.

1. Your gender:

☐ Female

☐ Male

☐ Transgender

☐ I prefer not to say

☐ Other \_\_\_\_\_

2. Your ethnicity:

☐ European American/Caucasian/White

☐ African American/Black

☐ American Indian/Native American

☐ Hispanic/Latino/Latina American

☐ Asian or Pacific Islander American

☐ Multiracial American

☐ I prefer not to say

☐ Other \_\_\_\_\_

3. Your sexual orientation:

☐ Heterosexual

☐ Gay/Lesbian

☐ Bisexual

☐ I prefer not to say

☐ Other \_\_\_\_\_

4. Your major: \_\_\_\_\_

5. Your year in school:

☐ First

☐ Second

☐ Third

☐ Fourth

☐ Other